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ABSTRACT

An experimental seminar in corporate communication at the University of Maryland was designed to (1) develop a set of theoretical concepts useful to the organizational communicator who functions as a mediator between management and labor, (2) utilize a practical methodology for these concepts, and (3) conduct a case study in cooperation with an outside organization to test these concepts and demonstrate their utility for a professional communicator. The seminar reviewed the literature on organizations and organizational communication and met with personnel from the communications department of the Potomac Electric Power Company (Pepco). The theoretical paradigm which evolved in the conceptual phase of the project predicted that individuals and systems would seek information when they perceived a problem and would seek information only about alternatives which were feasible within their situation. Although applied to the needs of only one organization, the study provided basic theoretical confirmation of the paradigm. (EE)

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INFORMATION SEEKING IN ORGANIZATIONAL COMMUNICATION: A CASE STUDY OF APPLIED THEORY

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A few months ago, several faculty members of the College of Journalism at the University of Maryland formulated a proposal for a series of seminars for employee communication personnel in a nearby corporation. Among the topics proposed was one entitled: "What employees want to know." One of the corporation's communication executives rejected that topic, however, because, as he said, "We decide what employees want to know."

A few years earlier we presented a similar series of seminars to a group of public affairs workers in a government agency. In explaining the nature of the communication network within an organization, I pointed out that upward communication generally tends to be biased in favor of what the superior expects to hear. At that point, someone asked what he could do to change that tendency in order to obtain accurate information from subordinates. Another seminar participant quickly answered: "Tell them to cut it out!"

Both of these anecdotes illustrate what I believe to be a critical oversight in theory and research on organizational communication--the failure to explain upward communication and then to prescribe procedures for improving that communication. Another way of saying the same thing is that the organizational communication literature does little to help the manager or administrator to improve his information seeking abilities. More often that literature deals only with his information giving abilities.

This oversight has been acknowledged by leading students of organizational communication. For example, in a brief overview of the

field published in the last year, Smith, Richetto and Zima summarize the "Implication of Upward- Communication Research" as follows:[1]

> A review of this area reveals a paucity of research. Historically, management's attitude toward upward-communication channels has been one of manipulation or control. Research would suggest that a pre-occupation with downward-directed communication has often inhibited the establishment of effective upward communication systems.

A few years earlier, Redding said much the same thing:[2]

> It might be thought that the almost fanatical emphasis upon the feedback concept in two decades of writings on communication would surely have generated a swarm of both laboratory and field researches on various kinds of feedback conditions and especially on such obvious corollary topics as listening and "upward" communication in complex organizations. Such, however, has not been the case...As Tompkins has clearly demonstrated, "there is a paucity of research on upward communication"; and probably one reason why this is true is an almost universal tendency on the part of business management to be downward-oriented...

The statements reveal that organizational communication research is concerned more with the information giving behavior of management than with information seeking behavior. They reveal also that management is more concerned with what I have called the system control function of communication than with the system change function.[3] In other words, the communications researcher or the professional communicator takes the system state defined by management as given and then determines how communication can be used to achieve employee cooperation with this

predefined state. Sometimes, the executive asks the communicator to help him change the system to meet his specifications (to diffuse an innovation). Seldom, however, does the executive asks the communicator to seek information from employee subsystems that will tell the management subsystem how to change itself in order to solve the larger systems's ongoing problems (to seek an innovation).

Perhaps this emphasis on one communication function at the expense of the other can be traced to the cybernetic paradigm which has long guided research and practice in organizational communication. The concept which is most at fault, as I see it, is that of feedback. Feedback is often equated with two-way communication, but I think this is a false equivalence.

Feedback generally means that the source gives a message to a receiver and then observes the receiver to see if the desired control has been attained. The observation by the source is the feedback; there is little is any information giving by the receiver. Rather he "gives off" a reaction or response to a control oriented message.

Take for example Redfield's discussion of the classic thermostat analogy for feedback in his chapter on "Communication and Control."[4]

> ...one can think of the "datum" as the temperature in the dining room, and the "receptor of information" as the thermostat on the wall which has been preset to seventy degrees. If the temperature in the room falls below seventy, the thermostatic mechanism "tells" the furnace (the "interpreter" or executive" in the diagram) to turn on the furnace. The furnace (the "effector" in the diagram) goes into operation and, through the pipes or ducts, send additional heat into the room (the feedback), changing the body of datum to match that requested by the receptor of information.

> The thermostatic mechanism now "notifies" the furnace control switch to turn off the furnace, and that condition continues until the heat again falls below seventy degrees. . .
>
> It is easy to see how this model applies to communication. An executive has certain standards (e.g., standards of performance or inventory balances), like the seventy-degree setting on a thermostat. When the conditions within the organization markedly deviate from these standards, an action cycle is initiated through the vehicle of communication. These actions are intended to affect the body of datum in a manner which will bring conditions back into line with the standards.

My criticism of the cybernetic paradigm is not intended to deny that system control is an important communication function for management. Rather it is to say that management change should be just as important a function. To carry the thermostat analogy a step further, the furnace (workers) should be able to give information that it cannot keep the room at 70 degrees and that management should be satisfied with 67 degrees. Or perhaps it might say that it would be happier burning gas rather than coal. Or it might say that it would like to be shut off at night for a rest or given a vacation in winter rather than summer. Or maybe diversification into air conditioning during the summer would keep it happier year round. It should be evident that all of these messages cannot be called feedback in the cybernetic sense.

A more adequate means of viewing two-way communication is what Thayer calls the diachronic communication mode, as opposed to the synchronic mode:[5]

> In the synchronic mode, the consequence sought or realized is the "synchronization" of the participants. It is the sort of encounter in which one of the participants, Y, has as his objective either (a) bringing the psychological state of another person, Z, from it present apparent-state-of-affairs to the state-of-affairs desired or intended by Y, or (b) achieving some intended-state-of-affairs through the actions or behavior of Z. In both cases, Z is the "sink" for Y's message. . .
>
> The end sought or realized from a communicative encounter in the diachronic mode is either (a) a new state-of-affairs between Y and Z, or (b) a new state-of-affairs between Y and Z and their respective environments. But, unlike the synchronic mode, the diachronic mode does not hinge upon the resolution of one or the other's intended-state-of-affairs, but upon a joint or cooperative effort to achieve <u>whatever</u> result comes from the encounter.

A concept similiar to diachronic communication is that of coorientation. Coorientation focuses the communicator's attention on the joint orientation of two "persons" rather than on a single person's orientation.[6] With either concept, communication is viewed as a transactional process in which individuals, organizations, and systems give and seek information to reach varying states of communication effectiveness. According to Chaffee and McLeod, the most important criteria for communication effectiveness are accuracy, understanding, and agreement.[7] Importantly, all are coorientational or diachronic effects, as opposed to the more common criteria of persuasion or attitude change which are orientational or synchronic in nature.

Using these concepts, then, organizational communication can be viewed as a transactional exchange of messages between subsystems within the organization and between the organization and systems in

its environment. The professional communicator can then be seen as a mediator who facilitates communication between subsystems and supra systems,[8] or as Carter says, who bridges the gaps in emergent systems.[9]

If the communicator is a mediator, what then should be his relationship with management? In existing organizational literature his role is generally to help management improve control, achieve cooperation, etc. If he uses the "scientific management" approach the communicator advises management on how to manipulate the structure of the organization so that control oriented messages reach their destination efficiently and are understood and obeyed. If he uses the human relations approach, the communicator would advise management on how to manipulate personalities and "human" conditions so that management can achieve the same objectives. The scientific management approach to communication, in other words, is essentially coercive, while the human relations approach is essentially propagandistic.

Perrow has introduced a third approach to organizations, which he calls the structural approach. This approach appears to be a more fruitful way to conceptualize the communicator's relationship to management. The structural approach is more similar to scientific management than it is to human relations but it combines important elements of both. With the structural approach, the manager's role is to prescribe patterns of behavior for employees (organizational structure) that allow those employees to work to maximum effectiveness (efficient production) while also allowing them to cooperate with one another and with management (effective human relations). In Perrow's

words:[11]

> Designing and managing the structure of the organization is the key. Behavior evoked by such devices as rules, role prescriptions, reward structures, and lines of communication is reinforced daily and becomes part of the stable expectations of employees. It is possible to design jobs, or roles, for the average person (assuming a given level of training and experience) rather than to expect an individual to have superhuman qualities to fill an impossible role.

Thayer characterizes the role of management, in a similar fashion, as the manipulation of constraints that govern the behavior of organization members. He says.[12]

> An organization continues to function as an organization only to the extent that its system of constraints is appropriate and adequate to the needs of the organization.

When the organization does not reach its goals, he adds, then management should modify constraints until goals can be met.

At first glance, it might seem inconsistent to incorporate the concepts of "diachronic communication" and "management through manipulation of constraints" within the same paradigm. The explanation, however, is clearcut.

No organization can be managed unless some degree of control is exercised. The mediating communicator helps management seek information on the personal, role, and organizational orientations of employees so that management can judge where to place and remove constraints that will channel employee behavior in productive directions without alienating them. In other words, the communicator helps management innovate in its management techniques through thorough understanding of

employees.[13] Management will also be able to communicate effectively downward when it understands employee orientations.

At this point, a detractor might object that it is idealistic to believe that an organizational communicator can ever be a mediator because he generally cannot resist being an "organization man." That is to say, when he mediates within the organization he will always be a member of at least one subsystem of the organization which will determine his perception of other subsystems. When he communicates externally, he cannot divorce himself from the organization as a system when he deals with other systems.

John Gardner writing in Self-Renewal: The Individual in an Innovative Society recognizes that organization membership is an important constraint on individual innovation within that organization. Yet he holds out the belief that professionalism offers a means of breaking that constraint. Professionals, he believes, are guided more by a professional view of their function than by a single organization's view of that function.[14]

Among the criteria generally included in most definitions of a profession is the criterion that a profession must be based on a body of knowledge. This means, for example, that a professional communicator can be a mediator only if he has a body of theory (in place of his individual and organizational biases) to guide his observations and communication.

However, most "theories" of organizational communication are of little use for a professional because they are generally descriptive

(e.g., they tell how information flows through an organization) or predictive (e.g., some say that upward communication will be biased in favor of the superior's expectations). Seldom is such theory explanatory. Most organizational communication theory falls into the category of what Brown calls empirical generalizations rather than theory because it leaves unanswered the question of why the empirical generalization occurs.[15] The "why" question can perhaps always be asked of any theory, but Brown says that as the answer becomes more and more abstract, the theory becomes more useful.

The rest of this paper, then, reports the result of an experimental Seminar in Corporate Communication at the University of Maryland[16] whose purpose was to 1) develop a set of theoretical concepts useful to the organizational communicator who functions as a mediator, 2) utilize a methodology which allows a communicator to use these concepts to mediate between organizational subsystems, and 3) to conduct a case study in cooperation with a real-world organization in order to test these concepts and to demonstrate their utility for a professional communicator.

Accordingly, graduate students in the seminar spent about a third of the semester reviewing literature on organizations and organizational communication.[17] Then the class met with personnel from the Department of Communications in the case-study organization, The Potomac Electric Power Company (Pepco) in nearby Washington, D.C.[18]

After this meeting, each student wrote a detailed paper reviewing and integrating the theoretical literature and isolating concepts which could be applied to an analysis of Pepco's communication problems. At

this point the class decided to concentrate on internal communication rather than external communication. The rest of the semester was devoted to making final decisions on relevant concepts, preparing a questionnaire, drawing a sample, interviewing employees, and analyzing the results.

Pepco's employee communications program consists of three print media: 1) Pepconian, a bi-monthly employee feature magazine, 2) News Board, a twice-weekly poster-sized summary of company news placed on the wall in plant and office locations throughout the company, 3) Perspective, a bi-weekly newsletter designed to keep middle-level management up-to-date on company news. Also being considered by Pepco were a bi-weekly employee newspaper, a series of verbal and audio-visual employee seminars on crucial topics such as nuclear power, and an employee "Direct Line" in which employees can direct questions to management and have them answered. Communication personnel also advise management on means of facilitating interpersonal communication within the organization.

The rest of this paper, then, reviews the concepts and methods employed, interprets the results of the study, draws implications for Pepco's employee communication program, and then discusses the implications of the study for organizational communications theory in general.

Concepts

The theoretical paradigm which evolved in the conceptual phase of the project had as its focal element a decision situation model developed by the author[19] which explains the kinds of situations in which

individuals and systems will seek information and the content orientation of the information they will seek. (Importantly, the model explains "why" communication takes place.)

That model was then enlarged to include coorientation of organizational sybsystems and individual perceptions of organization structure (perceptions of constraints). It was then combined with various measures of employee communication behavior to give a composite picture of employee information needs and communication behavior.

Briefly stated, the basic model predicts that individuals and systems will seek information when they perceive a problem.[20] To have a problem means simply that an individual recognizes that he has a choice between alternative products, jobs, ways of performing daily tasks, etc. Individuals seek information only when they perceive a problem and they pay attention only to messages and media which provide information relevant to their problem orientation -- i.e., the problems they think are most important.

Secondly, the model predicts that individuals will seek information only about alternatives which are feasible within their situation or environment. An employee, for example, will not seek information about a top management job if he has less than a high school education because his lack of education constrains out that alternative.

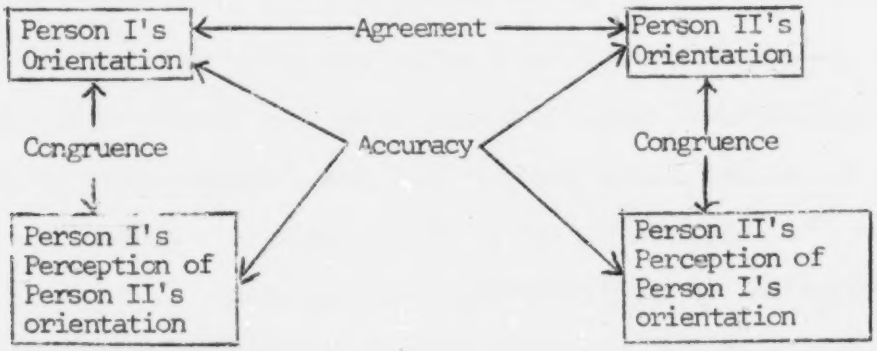
In this study of Pepco, we utilized these concepts in several ways. We first asked employees questions to determine whether they considered looking for another job and coded their response according to whether they perceived a problem and whether they faced constraints (their job

decision situation). Then we asked them to rank several possible problem orientations for a job in general (job orientation),[21] for Pepco as an organization (organization orientation),[22] and for their role within Pepco (role orientation).[23] In addition, we asked which organization orientations were ruled out by constraints, those which could not be achieved by Pepco. All of these responses again would predict the kinds of information content that would be perceived as relevant to employees.

Next, we applied the concept of coorientation in order to determine the effectiveness of communication between management and employees. Coorientation is simply the extent to which individuals understand and share each other's orientations. To measure coorientation, a researcher asks each respondent for his own orientation. Here, as previously described, we asked for his job orientation, role orientation, and organization orientation. Then the researcher asks each respondent to predict how some other respondent or group of respondents would answer the same question. In this study we asked workers to predict how top management would answer the questions and asked top management how workers would answer the questions.

The relationship between these responses then provides three criteria for determining the effectiveness of communication. As indicated in the diagram on the following page, these criteria include: 1) congruence -- the extent to which each person's orientation matches what he perceives to be the other person's orientation, 2) accuracy -- the extent to which the perception of the other person's orientation matches that person's

actual orientation, 3) overlap (or agreement) -- the extent to which the two persons actually have the same orientation.[24]



After measuring orientation and coorientation, we asked respondents what they perceived to be the positive and negative attributes of their present jobs.[25] These attributes should reflect the extent to which the characteristics of their present job satisfies their job orientation. Similarly, we asked questions designed to measure their job satisfaction and the extent to which they desire to be promoted to a position higher in the hierarchy (upward mobility aspiration).

Next we attempted to measure each employee's communication behavior related to Pepco. Employees were first asked to rank sources to which they might go when they need information about Pepco (Pepco information source), the sources from which they had heard about five different Pepco information items (diffusion source),[26] their exposure to and evaluation of three existing Pepco media (News Board, Pepconian, and Perspective), and their anticipated exposure to a projected employee newspaper, employee "direct line" to management, and employee seminars on special topics.

We also asked employees what kind of information content they prefer about Pepco.[27] Then we asked to what extent they give information about Pepco to acquaintances outside the organization -- to determine the effectiveness of employees as a medium to outside publics. And since the organizational theory literature shows that members of an organization communicate upward only when they have favorable information to report,[28] we measured the extent of each employee's upward favorable communication and upward unfavorable communication.

Because of the emphasis on Perrow's theory that employee morale, performance and communication depend greatly on the structure of the organization, we used several concepts to determine employee perception of organizational structure.

First, we asked if the organization was authoritarian (decisions concentrated at the top) or democratic (decision making taking place at several levels).[29] Also, we asked, what was the management style: Coercive (using punishment to secure cooperation), utilitarian (using rewards when desired employee behavior is achieved), normative (appeal to organizational loyalty and common purpose)[30] or problem solving (a mutual interaction and change when necessary by both employees and management).

Then, we determined the degree of relative importance employees believe their subsystem (generally a department) has in Pepco and the conflict they perceive their subsystem to have with other subsystems.

The final structural variables concerned employee perceptions of the nature and purpose of management communication. Does management

primarily give information to employees or does it also seek information from employees -- i.e., is communication one-way or two-way. And does management communicate with employees in order to control their behavior or to change itself after learning of employee needs and problems.

The final set of variables included demographic locators needed to better identify employee types -- age, sex, education, race and level in the Pepco hierarchy.

In summary, the concepts applied in the study should show the following: problem orientation and constraints -- whether employees are motivated to seek or receive information and what kind of information should be relevant to them; coorientation -- the success of communication and the degree of understanding and shared purpose within the organization; communication -- the actual communication behavior and information needs of employees; structural variables -- the way the organization is seen by its employees; locator variables -- the kinds of people we are talking about.

Methods

Most standard survey research methods result in a distribution of responses to a series of variables or questionnaire items. At times, these variables are related to one another by correlations or other measures of association. These methods (generally called cross-sectional techniques) have one fault when they are used for applied communication research. They cannot reveal types of sub-audiences or publics within the overall audience. Nor can they reveal the most important differences between these audience types. Cross-sectional methods can only show

the distribution of the entire sample around one or a small number of variables.

An alternative method -- case grouping -- seems perfectly adapted for applied communication research. In case grouping, the researcher puts each respondent into one of a limited number of respondent types based on their similarity on all (or the most important) concepts measured. Then concepts can be compared within and across types to determine the importance of the concept in defining the type and in distinguishing it from other types. In the case of employees, the results would show the kinds of employees the communicator must deal with and how these types differ from one another on all the variables.

Case grouping analysis can be accomplished rapidly through the use of Q-factor analysis.[31] Q-analysis was adopted here to make use of survey data rather than Q-sorts. The specific procedure is as follows:

1. A number of variables are measured for each person in the sample and converted to standardized Z-scores. Z-scores are simply a person's score on a variable minus the mean for that variable divided by the standard deviation. Z-scores range from -3 to +3 with 0 as the mean. Z-scores are necessary because all the variables in a field study generally are not on the same scale, yet they must be on a standard scale to make correlation and grouping of people possible.

2. A matrix is developed in which each person is correlated with every other person in the sample using the standardized scores for all variables.[32] This step is the reverse of standard correlation techniques in which two variables are correlated on the basis of a sample of people; here two people are correlated on the basis of a sample of variables.

3. This matrix of correlations is submitted to factor analysis in order to abstract underlying factors -- that is, factor analysis places each person into one or more groups on the basis of his intercorrelation with other people. The factor represents a grouping of people around a common set of attributes -- a type of person. The factor loading (between 0 and 1.0) of each person indicates how strongly he represents or is typical of the group.

4. The importance of each variable in describing the type of person is determined by computing factor scores for each variable on each factor. This computation is made by weighting the variable score of each individual in a factor by his loading on the factor and summing the result for all individuals in the factor. The factor scores are then standardized into Z-scores to allow comparison across factors.

5. Comparison of the Z-scores for all variables on one factor indicates which variables are most important in defining the type of person. Comparison of the Z-scores for each variable across factors indicates their relative importance in distinguishing one type of person from another.

Q-analysis is more interested in defining types of people -- or publics -- than in knowing the exact distribution of types of people within an overall population. Thus, the sample generally is chosen purposively rather than randomly. A purposive sample allows measurement of the range of people within a population without wasting time and money repeatedly measuring the average or modal type of person (which generally makes up about two-thirds of any population).

In this study, Pepco employees were purposively sampled from salaried, weekly, and hourly positions (to represent all levels of the hierarchy). They were also chosen from representative locations: Benning Road generating station, Kenilworth stores, Benning Rd. and Rockville service centers, Morgantown generating station and 1900 Pennsylvania Ave. Students personally interviewed 50 employees from these locations.

In addition, a random sample of 50 from the entire Pepco employee population was taken. This sample allowed an estimate of the percentage of each type in the population and also minimized the possibility that any important employee type might have been missed in the purposive sample. These 50 respondents were interviewed by telephone.

The questionnaire was coded into 101 items measuring the concepts elaborated above. Computation was done at the University of Maryland Computer Center with financial support from the Center.

Results

Thirty-six tables are included at the end of this report detailing employee types and comparing them on the concepts measured. Tables 1-6 show the distribution of the 101 items for each type. Tables 7-24 compare the three types.

Since all of the tables are in standardized Z-scores, Table 25 is included to show the average and standard deviation for each variable. These put the Z-scores into perspective, indicating whether an average Z-score means the entire sample is high, low, or in the middle of the possible range of a particular variable. Tables 25a-35 report the total sample distribution of the communication media variables of special interest to Pepco's employee communications department.

Definition of Types. Tables 1-3 indicate the distribution of all items for the three factor types that emerged from computer analysis of the data. Astericks indicate those variables on which a type is higher than or lower than the other types. Tables 4-6 compare the three types, showing the greatest differences distinguishing them from one other.

Type I is an employee who is low in the organizational hierarchy, below average in education and mobility aspiration, and low in exposure to communications from Pepco. He is high on constraints limiting his job mobility and low on problem recognition (he doesn't consider alternative jobs). Most of the respondents fitting into this type are hourly and weekly production workers, although a few are clerical workers and two are lower-level supervisors. Because of these characteristics, we have named this type the Constrained Older Workers.

Type II consists of all of the executives interviewed, most of the supervisors, several secretaries, and a few production workers. As the tables indicate, this type displays most of the characteristics expected of management -- such as high exposure to a management medium (Perspective), high level in the hierarchy, job satisfaction, and consumer orientation. Accordingly, this second type was named Management.

Type III is composed of lower echelon people, but people slightly higher in the hierarchy than Type I. Most were clerical and service workers although a few were production workers. Importantly, they are young, high in aspirations, have an open job situation and perceive their job as a problem (consider other jobs). At the same time, they are dissatisfied with their job and with a perceived difficulty of promotion. This type, then, we called the Dissatisfied Younger Workers.

Comparison of the random and purposive samples shows that no type came exclusively from either sample. Thus, the purposive sample was an accurate representation of the make-up of the total employee population. Table 24 shows that there was about the same percentage of the three types in both samples. Nevertheless, the random sample gives the closest approximation of the distribution of the three types in the company: 50 percent Constrained-Older Workers and 25 percent each of Management and Dissatisfied Younger Workers.

Job Orientation. Table 7 shows that the primary job orientation of the Constrained Older Workers is salary and benefits, followed by working conditions and job ease. "People worked with" ranks slightly above average in importance for this group. Dissatisfied younger workers, on the other hand, are oriented toward achievement and job ease. Management ranks slightly above average on achievement and people, but well below average on salary and benefits, job ease and working conditions.

When viewed in terms of the coorientation variables, these results reveal substantial disagreement between Management and the Constrained Older Workers. Salary and benefits, working conditions and job ease are important to the older workers but not to management. On the other hand,

Management and Dissatisfied Younger Workers agree on achievement as a job orientation but disagree on job ease (important to younger workers) and "people" (important to management).

The other coorientational relationships show that Constrained Older Workers feel congruent with management but that this perceived relationship is highly inaccurate. Dissatisfied younger workers believe themselves less congruent with management and this perceived disagreement is essentially accurate. The primary discrepancy is that the Dissatisfied Younger Workers believe that job ease and achievement are more important to management than they really are.

Coorientation comparisons for the management type show that management perceives its own job orientation to be essentially the same as that of workers (high congruence). This is a reasonably accurate prediction of the orientation of the Dissatisfied Younger Workers, but not of the orientation of the Constrained Older Workers. Management underestimates the older workers orientation toward salary and benefits and working conditions, and to a lesser extent the orientation of both worker types toward job ease.

Decision Situation. Table 8 shows the extent to which the three types consider alternative jobs and perceive constraints to moving to another job. The Constrained Older Workers do not recognize a problem -- i.e., they are least likely to be considering other jobs -- and they face the most constraints to finding another job -- primarily age constraints. The younger workers, however, are the reverse. They score high on problem recognation and low on constraints. If the decision theory stated earlier holds, the younger workers should be motivated to seek any information which allows them to compare their present job with other jobs. In contrast, the older workers would be more likely to seek information reinforcing their view

that they have a good job and that Pepco is a good place to work. Management falls in the middle on both concepts -- indicating that it should be moderate in seeking both kinds of information.

Job Attributes. In two open-ended questions, respondents were asked what they liked and disliked about their present jobs (positive job attributes and negative job attributes). After listing all of these responses, major inclusive categories of attributes were developed and responses were coded accordingly. Seven categories each of positive and negative attributes resulted.

As could be expected from their job orientation, Constrained Older Workers most often like location, facilities and working conditions of their job, the people they work with, and the salary and benefits. But they also most dislike working conditions, and they are also above average in dislike of management.

The only positive attributes on which the Dissatisfied Younger Workers score above average are "job ease" and "people worked with." They seldom if ever mention working conditions, or salary and benefits. This type scored slightly below average on work satisfaction and challenge. But as Table 25 indicates, 60 percent of all respondents mentioned this attribute, so that a below average relative score still would mean this group perceives the attribute to be positive for its job.

Likewise, the Dissatisfied Younger Workers score above average on nearly all negative job attributes -- especially supervisor, difficulty of promotion, salary and benefits, and management. These attributes again can be explained as failure of their job to meet their job orientation toward achievement.

The Management type most often mentions work satisfaction and challenge and treatment by the company as positive job attributes. But it is well below average on working conditions, people, and job ease. Similarly, Management does not score above average on any of the negative attributes. Management's decision situation -- moderate problem recognition and moderate constraints -- falls into a classification of what this author has called routine habit. Typically it is characterized by attachment to or satisfaction with a psychological object (Pepco) -- see the attribute "treatment by company" -- but infrequent comparison of objects in terms of their attributes. This theory, then, seems to explain well the low relative importance of any of the attribute scores in determining this type.

Organization Orientation. Next we look at the problem orientation employees think Pepco should have as an organization. Table 10 compares five orientations: profits, consumers, efficiency, employees, and environment. This table shows that Constrained Older Workers rank employees and efficiency highly and environment moderately high. However, they put consumers and profits low in priority. Dissatisfied younger workers put environment high and efficiency low, and score about average on the other orientations.

Management, on the other hand is oriented first toward consumers and second toward profits. Environment and employees are of relatively little importance to this type.

In coorientation terms, both worker types predict that management will be primarily oriented toward profits. Neither worker type, however, feels congruent with management on this orientation. These worker predictions are reasonably accurate as management is above average on profit orientation.

Management is accurate in predicting that workers are not concerned with profits. The greatest inaccuracies in organization coorientation are in the failure of both worker types to recognize management's consumer orientation and in management's predictions that workers will be congruent with them in their consumer orientation. Both worker types also overestimate management's concern with the environment and employees. Management also underestimates the concern of both employee types for the environment -- especially the concern of the Dissatisfied Younger Workers.

We also asked respondents if they perceived any situational constraints that would make any of these organizational orientations impossible for Pepco. Although few of the respondents believed any of these orientations to be constrained (Table 25), 10-13 percent perceived constraints on employee, consumer, and environment orientations. Table 11 shows how the three types differed in perceiving these constraints. Constrained Older Workers were highest in believing that an employee orientation would not be possible for Pepco, Dissatisfied Younger Workers in believing that efficiency would not be possible. Management did not perceive any constraints.

This means, then, that although Constrained Older Workers say Pepco should have employee orientation, many of them think such an orientation is impossible for Pepco to achieve. Such a situation (the author has called it constrained decision) usually discourages information seeking by the person in the situation. As we will see later, this is generally the case for the Constrained Older Worker.

On the other hand, the Dissatisfied Younger Workers feel that efficiency should not be an orientation for Pepco and many of them also feel that it is impossible. Predictably, then, this type would not seek any information

relating to efficiency -- as is often reputed to be the case with younger workers in American industry in general.

Role Orientation. The final orientation variable -- role orientation -- measures the problems employees think are most important for them to solve in their own roles or positions within the company (Table 12). Respondents were asked to rank the same five possible problem orientations that they had ranked for Pepco as an organization. Interpretation of these orientations is only slightly different for roles than for the entire corporation. For example, an efficiency orientation means an employee believes he should do his job efficiently, an employee orientation means he is mostly concerned about being happy in his job.

On this variable, the Constrained Older Workers rank above average on all possible orientations, with the exception of consumer orientation. Here they are well below average. Their strongest orientation is environment, followed closely by profits, efficiency and employees.

These scores can best be understood by comparing them with the scores for the other two types. Both Dissatisfied Younger Workers and Management, are oriented predominently toward consumers. None of the other orientations distinguish the type. In other words, these two types stand out in their consumer orientation while the orientations of the Constrained Older Workers reflect many individual differences within the type. Table 25 shows an efficiency and an employee orientation were the two highest ranked role orientations for the entire sample. Thus the older workers Z-scores on these two variables are probably most meaningful. These two orientations are also consistent with the organization orientation of the older workers.

It is also interesting to note that management ranks profits low in its role orientation but highly in its organization orientation. However,

Management is consistent with its organization orientation in ranking environment well below average and the lowest of the three types. In other words, neither profits nor the environment seem to enter into managements day-to-day orientation, although it believes profits are important for the entire organization.

Of the coorientation variables only congruency and to some extent agreement apply for this variable. This is because the question asked respondents to rank role orientations for themselves and then as they thought the other group (either management or workers) would rank the orientation for the respondent's job. Thus accuracy would be a comparison of how a respondent thinks the other group sees the respondent's job compared with the "other's" orientation toward his own job. Clearly, it has little meaning. Congruence in this case measures how closely respondents believe their job orientation is to the orientation they believe the other group would see for the same job. Agreement indicates how closely these types believe their orientations are for different jobs.

Table 12 shows that Constrained Older Workers believe that management thinks they should be more profit oriented than they themselves think they should be. And they are more efficiency and employee oriented than they believe management thinks they should be.

Dissatisfied younger workers are remarkably congruent with management in their role orientation. They are consumer oriented and they believe management would also see their role this way.

Management is more consumer oriented than they predict workers would think they should be. And they are less employee, efficiency and environment oriented than they predict that workers think they should be.

Agreement relationships show that Dissatisfied Younger Workers and Management overlap in a consumer orientation, but that both see different roles for themselves than do the Constrained Older Workers (as explained above).

Aspiration and Satisfaction. Table 13 can be interpreted easily. Dissatisfied Younger Workers have high aspirations to move up in the hierarchy. Constrained Older Workers and Management do not. The older workers probably cannot move up, management is already at the top.

Precisely the reverse holds for job satisfaction. Management is highly satisfied, Constrained Older Workers moderately satisfied, and Dissatisfied Younger Workers highly dissatisfied.

Pepco Information Source. Table 14 can be interpreted as showing that Constrained Older Workers go to no particular source when they need information about Pepco, that Dissatisfied Younger Workers go through the grapevine, and that Management already knows what is happening in Pepco and doesn't need to go to anyone for information.

The high grapevine scores for the younger workers reflect the fact that ambitious but dissatisfied employees do not trust the content of formal communication channels. The moderate scores across the board for Constrained Older Workers probably indicates that one important source -- the union representative -- was not included among the possible choices while many respondents indicated this representative was their most important information source.

Communication Network. According to Table 15, only Management talks much about Pepco to friends and neighbors. Thus employees probably are not as good a channel to external publics as often is believed.

The vertical communication variables do not support the frequent theoretical prediction that only favorable communication flows upward. Management communicates more favorable than unfavorable communication upward, but it scores above average on both variables. Dissatisfied Younger Workers communicate neither favorable nor unfavorable information while Constrained Older Workers communicate slightly more unfavorable than favorable information upward. Table 25 shows, however, that the means for the entire sample are low for both variables.

Thus, these results can best be interpreted as showing that the management type is an information giver while the two worker types are not. The predicted bias of favorable over unfavorable information holds to some extent for management, but just the opposite seems to be true for the workers. This could mean that previous studies showing the predicted result have been conducted on a white-collar rather than a blue-collar sample.

Diffusion Sources. Respondents were asked if they had heard five information items about Pepco and where they had heard them. They were not given a list of categories to choose from but their responses were coded into one of eight categories.

Table 16 shows that the Constrained Older Workers had heard few of the items. They scored above average only on hearing the information from the News Board, Pepconian and outside media. This undoubtedly reflects the fact that these are the only channels where these employees could have heard this information since their word-of-mouth channels would not generally carry information about a nuclear power plant, an environmental park, or the appointment of a vice-president.

Dissatisfied younger workers were more likely to have heard the information, and they also heard it from Pepco media or from outside media. But

they also were above average in hearing the items from informal internal channels. Management, as could be expected, had heard the items and generally got the information from internal formal channels or from Perspective, a publication intended for management alone.

Pepco Media Exposure and Evaluation. The results on these variables should first be put into perspective by looking at the distributions for the total sample in Tables 25 and 28-34. Both exposure to and evaluation of present and proposed media are extremely high for the entire sample. Only Perspective ranks low because it is intended to reach only a small part of the sample. The results in Table 17, then, show variations for the three types around an already high average.

As could be expected from their lack of problem recognition and their constrained situation, the Constrained Older Workers are below average on all of the exposure and evaluation variables. Their highest exposure is to the Pepconian, probably because it is the medium most likely to carry the reinforcing kind of information they seek about Pepco.

Dissatisfied younger workers score highest on exposure to the News Board and on expected exposure to a newspaper, on desire to attend employee seminars, and on use of a proposed "direct line" for questions to management. These employees decision situation motivates them to seek information directly relevant to their jobs and the status of Pepco. News Board, a new newspaper, and seminars are most likely to give them this information. Thus, they use these media. Also, because they are dissatisfied with their jobs and with management, the anonymous questions which they could send to management through a direct line would give them the chance to express their dissatisfaction without jeopardizing their aspirations of moving up in the hierarchy.

The management type scores above average on all of these variables except the direct line (which makes sense since questions in the line would be addressed to them). They also are the only type to rank above average in evaluation of any of the media. Most information about Pepco is relevant to management, so they seek it out wherever possible -- including both reinforcing information and hard factual information.

Information Preferences. Table 19 shows that Constrained Older Workers want to hear about other employees and their own role in Pepco. They want to be reinforced that people are happy working in Pepco and that they have an important role in Pepco.

The Dissatisfied Younger Workers, it was shown above, are problem solvers, and as problem solvers they want to know the attributes of their jobs. Their information preferences reflect this situation, showing that they want to know about decisions affecting employees, about Pepco's financial standing, and about decisions affecting consumers.

Management most prefers information on decisions affecting employees -- reflecting its consumer orientation. But the type is also above average in its preference for financial information and information on government regulation -- information which has direct relevance for management.

Perceived Organizational Structure. When all respondents in the study were asked if they believed Pepco to be an authoritarian or democratic organization, the predominant answer (Table 25) was that it is authoritarian -- i.e., that decisions are made in higher ranks of the organization and not throughout the hierarchy. Surprisingly, the Dissatisfied Younger Workers were most likely to say that Pepco is a democratic organization (Table 20). Management was slightly above average on this variable,

Constrained Older Workers slightly below. The younger workers, because they are higher in the hierarchy than the older ones, probably do participate in more organizational decisions than do the older workers. Thus they perceive the organization as more democratic. Management, however, is probably realistic in acknowledging that most decisions are made at the top.

Turning to the purpose of management communication (Table 21), we see that the management type views the nature of its communication to be more information seeking from employees than information giving to employees. Both employee types feel precisely the opposite.

None of the three types, however, deviate much from the average in their perception of the function of management communication being either control or change. All three types basically agree that the purpose is control more than change (Table 25). If Pepco is indeed an authoritarian organization (as Table 25 also indicates) then control would be the expected internal communication function.

Table 22 reveals another obvious split between management and workers in perception of organizational structure or its patterns of behavior. When asked whether Pepco's management is coercive, utilitarian, normative, or problem solving, both worker types score above average on coercive and average or below average on the other three management styles. Management, on the other hand, scores below average on coercive and well above average on the utilitarian, normative and problem solving managerial styles in that order.

Table 23 shows that the types differ little in the relative importance they perceive their subsystem to have for Pepco or in the amount of conflict they perceive between sub-systems. Table 25 reveals that these averages mean that most of the respondents perceive their subsystem to be important and

few perceive conflict. Management, however, is most likely to perceive its sub-system as important, Dissatisfied Younger Workers as least important. And the younger workers are most likely to perceive sub-system conflict.

Locators. Table 23 restates the conclusions stated earlier in describing the age, years with Pepco, education, and level in the hierarchy of the three types. It also adds the facts that Constrained Older Workers are least likely to be female, Management least likely to be black. Table 25 further shows that 84 percent of the sample was male, 79 percent was white.

Recommendations

The above results are extensive and can lead to many kinds of conclusions. For the employee communications section, however, the following three sets of recommendations would seem to be most important: how to reach the three types, how to orient present and planned Pepco media, and the need to improve management-employee understanding.

Reaching the Three Types. The Constrained Older Workers job orientation is salary and benefits, location and work conditions, and job ease, their organization and role orientations are efficiency and employees. Their situation is constrained and they do not look for job alternatives. They are least likely to hear information about Pepco and least likely to use Pepco media -- although they do use the media. Their preferred medium is Pepconian, their information preferences are for information about other employees and on their own role in Pepco.

Reaching this type is difficult because they are not information seekers -- especially of "news" about Pepco. Basically, they want only to know that they are respected, that their jobs are made as pleasant as possible, and that they are rewarded for their work. In other words, they can be reached

by messages reinforcing them that Pepco is a good place for them and others to work. To a large extent, this is what reading Pepconian does for them.

The Dissatisfied Younger Workers are problem solvers, looking for and evaluating alternative jobs. Their job orientation is achievement, their organization orientation the environment, and their role orientation consumers. In short, they are concerned about Pepco's effect upon them and upon others, and they prefer information about this impact. They expose themselves to Pepco media which provide this information -- the News Board -- and would use new media which promise to provide it -- a newspaper and employee seminars. They would communicate their dissatisfaction with management through a direct line. They can be reached with "news" media carrying factual information about Pepco decisions which affect them, consumers, and the environment.

Management employees, the study shows, have less need for formal Pepco media since they have first-hand access to the same information. However, they do expose themselves to these media. Their orientations and information preferences are toward consumers. The Communications Department could provide them this information by feeding back information from the consumer public to management. Management also has a poor understanding of the orientations of its workers and employee communications should facilitate information flow from workers to management. Both studies such as this one and a direct line could help accomplish this objective.

Media Orientations. The media which should be continued, discontinued, or added are beyond the purview of this study since they involve budget decisions. Nevertheless, recommendations can be made as to which media can best reach which employee types.

The News Board and newspaper are probably the most important media because they reach the employees who most need and seek information -- the younger workers and to some extent management. They should truly carry news, especially/relating to management decisions that affect employees, consumers, and the environment. To a lesser extent they should carry financial and regulatory information. Seminars on these same topics could reach the same employee public.

These media would be less effective in reaching the Constrained Older Workers, because these employees are not seekers of news. They prefer instead stories on other employees, on retirements and transfers, and on how they play a vital role in the operation of Pepco. Pepconian, an attractive reinforcing publication, could well serve this public.

Finally, Perspective does seem to achieve its objective in reaching lower level management. Employees would use the direct line, but it would reflect mostly the views of dissatisfied employees and would not provide an accurate picture of the sentiments of all employees.

Employee-Management Understanding. The coorientation variables reveal that management and workers do not understand the orientations and roles of one another -- the Constrained Older Workers and Management types especially do not understand one another. Workers also see the management structure as more coercive, authoritarian, and control oriented than management believes it to be.

Studies such as this one should help management better understand worker orientations, but communication is needed to show workers how management thinks and what its role is. There are many ways of communicating such information, but perhaps stories in the newspaper or Pepconian about

individual management personnel, their day-to-day behavior, their ambitions for Pepco and its employees, how they regard employees, their concern for consumers, etc. could help bridge the gap.

Implications for Organizational Communications Theory and Practice

Although the results and discussion to this point have been keyed to the needs of one organization, the study has also provided basic theoretical confirmation of the paradigm conceptualized above. The decision situation and problem orientations of employees have been shown to be good predictors of employee information seeking and giving activities. For example, the situation of the constrained older workers is such that they would communicate little or seek only reinforcing information. This was confirmed by the analysis of the media exposure and other communication variables. Exactly the opposite situation was confirmed for the Dissatisfied Younger Workers.

If the ultimate test of any social science theory is its practicality, then the results of this study have confirmed the authenticity of the theory presented. It explains well the information needs of employees, their perceptions of the constraints which management imposes upon them, and the extent of understanding between subsystems within the organization.

Likewise, the results have proven to be as useful to a practitioner as to a theoretician. The study came at an opportune time for Pepco since it had experienced a change in management a year ago, had hired a new director of communications within six months, and is anticipating an expansion of the employee communications program. Pepco hired a new editor for the planned newspaper in January who is basing many of her plans for

this publication on the results of our study. The results will also provide support for the employee communication program at budget time. And the study will soom be used for counseling management on its employee communication problems. In short, the study has allowed Pepco's employee communication personnel to assist management in seeking information from employees.

FOOTNOTES

1. Ronald L. Smith, Gary M. Richetto, and Joseph P. Zima, "Organizational Behavior: An Approach to Human Communication," in Richard W. Budd and Brent D. Ruben (eds.), Approaches to Human Communication (New York: Spartan Books, 1972), p. 279.

2. W. Charles Redding, "The Empirical Study of Human Communication in Business and Industry," in Paul E. Ried (ed.), The Frontiers in Experimental Speech-Communication Research, Proceedings of the First Conference in Speech Education and Experimental Speech Research, Syracuse University (Syracuse: Syracuse University Press, 1966), pp. 47-82.

3. See James E. Grunig, "Organizational Communication and Social Action," Paper presented to the International Communication Association, Atlanta, Georgia, April 1972; or James E. Grunig and Keith R. Stamm, "Communication and Coorientation of Collectivities," American Behavioral Scientist (March-April 1973).

4. Charles E. Redfield, Communication in Management (Chicago: University of Chicago Press, 1958), pp. 152-153.

5. Lee Thayer, Communication and Communication Systems (Homewood, Ill.: Richard D. Irwin, Inc., 1968), pp. 129-130.

6. The concept originated with Newcomb, but has been explicated most thoroughly by Chaffee and McLeod. For the original published article see Steven H. Chaffee and Jack M. McLeod, "Sensitization in Panel Design: A Coorientational Experiment," Journalism Quarterly 45 (1968), pp. 661-669. For the most recent review of coorientational research, see the March-April 1973 issue of American Behavioral Scientist to be published in late April.

7. See Chaffee and McLeod, Op. cit. These concepts will also be explicated later in this paper.

8. See Grunig and Stamm, "Communication and Coorientation of Collectivities," Op. cit.; also Hans C. Groot, "A Diachronic Communications Construct for Information Systems Analysis in Development," Paper presented to the International Communications Association, Phoenix, Arizona, April 1971.

9. Richard F. Carter, "A General System Characteristic of Systems in General," Paper presented at the Far West Region Meeting of the Society for General Systems Research, Portland, Oregon, September 1972.

10. Charles Perrow, Organizational Analysis: A Sociological View (Belmont, Calif.: Brooks/Cole Publishing Co., 1970).

11. Ibid, p. 176.

12. Thayer, Op. cit., p. 98.

13. One of the advantages management has in dealing with employees is that it can manipulate the organizational structure which determines employee behavior to a large extent. Management has no such advantage in communicating with external publics, and its public relations activities must work around the structure which determines behavior of its publics. Public relations communications with external publics is another fascinating area for theory and research largely untouched to date. It will be mentioned in this paper only in passing because the research reported later deals only with internal communication.

14. John W. Gardner, Self-Renewal: The Individual and the Innovative Society (New York: Harper Colophon Books, 1964).

15. Robert Brown, Explanation in Social Science (Chicago: Aldine Publishing Co., 1963).

16. Students participating in the seminar included Shirley Al Doory, Fred Jacoby, Kay Lewis, Marie Mastin, and Harriet Rothenberg. The theory and research reported here is as much or more the result of their efforts as it is of mine.

17. Two bibliographies used in the literature search were: Robert M. Carter, Communication in Organizations: A Guide to Information Sources (Detroit: Gale Research Co., 1972) and Henry Voos, Organizational Communication: A Bibliography (New Brunswick, Rutgers University Press, 1967).

18. Special credit should be given to E.R. Anthony, Manager of employee communications at Pepco for his close work with the group and valuable advice throughout the semester.

19. For previous applications of the model see James E. Grunig, "Information and Decision Making in Economic Development," Journalism Quarterly 46 (Autumn 1969), pp. 565-575; James E. Grunig, "Communication and the Economic Decision Making Processes of Colombian Peasants," Economic Development and Cultural Change 19 (July 1971), pp. 580-597; James E. Grunig, "Communication in Community Decisions on the Problems of the Poor," Journal of Communication 22 (March 1972), pp. 5-25. It has also been applied in two articles currently in progress: "Organization-Clientele Communication in a Community Development Agency," and "Stopping Experiments and Science Writing."

20. Carter proposes a similar concept, "observation of a gap," as the motivating factor for communication in a system. Richard F. Carter, "On Defining Communication," Paper prepared for the journal Communication.

21. Alternative job orientations offered as a choice included salary and benefits, people you work with, working conditions, achievement, and job ease.

22. Alternative organization orientations included profits, consumers, efficiency, employees, and environment. These approximated Perrow's five types of organizational goals: Societal, output, system, product, and derived goals. Perrow, Op. cit., pp. 134-136.

23. The same alternative role orientations were offered as for organization orientation. Here, however, the choices referred to what the employee tries to do in his own job, not what he thinks the entire organization should do.

24. Chaffee and McLeod, Op. cit. (footnote 6).

25. For the importance of discriminating attributes in predicting information seeking behavior see Steven H. Chaffee, "Conflict, Information-Seeking, and the Discriminating Attribute," in Steven H. Chaffee et al., Experiments on Cognitive Discrepancies and Communication, Journalism Monograph No. 14, December 1969.

26. This is an approximation of Keith Davis' ECCO analysis. See Keith Davis, "A Method of Studying Communication Patterns in Organizations," Personnel Psychology 6 (Autumn 1963), pp. 301-312. Also, Evan E. Rudolph, "An Evaluation of ECCO Analysis as a Communication Audit Methodology," Paper presented to the International Communication Association, Atlanta, Georgia, April 1972; and Richard V. Farace and Hamish M. Russell, "Beyond Bureaucracy--Message Diffusion as a Communication Audit Tool," Paper presented to the International Communication Association, Atlanta, Georgia, April 1972.

27. Choices included information about other employees, Pepco's financial status, government regulation, the employee's role in Pepco, decisions affecting consumers, and decisions affecting employees.

28. See, for example, Voos, Op. cit., pp. 4-6.

29. These were derived from the wheel and circle designs of the classic laboratory experiments. See, e.g., Arthur M. Cohen, "Communication Networks in Research and Training," Personnel Administration 27 (1964), pp. 18-24.

30. These first three styles are adapted from Etzioni's concept of types of compliance, which he uses to compare types of organizations. Amitai Etzioni, A Comparative Analysis of Complex Organizations (New York: The Free Press, 1961).

31. For additional background see Malcolm S. MacLean, Jr., "Some Multivariate Designs for Communications Research," Journalism Quarterly 42 (Autumn 1965), pp. 614-622; William Stephenson, The Study of Behavior: Q-Technique and Its Methodology (Chicago: University of Chicago Press, 1953); Raymond B. Cattell, Factor Analysis (New York: Harper & Row, 1952), pp. 90-102. The program used here was developed by G. Norman Van Tubergan at the Mass Communication Research Bureau, University of Iowa. Robert Wood of the University of Maryland wrote the program used for Z-transformations of the data.

32. Intersection coefficients were used as a correlational technique because of the nominal and ordinal scale nature of the data. Intersection coefficients express the percentage of responses on which two respondents agree. For further background see George W. Snedecor, Statistical Methods, 5th ed. (Ames, Iowa: Iowa State University Press, 1956), p. 170.

Table 1: Relative importance of 101 items in defining employee type I, constrained older workers.[1]

Item	Z-score[2]
*Positive job attribute--location, facilities, conditions.	2.53
*Prefer information on other employees.	2.50
*Diffusion source--not heard.	2.16
*Role orientation--other, profits.	1.95
*Prefer information on own role in Pepco.	1.84
*Job decision situation--face constraints.	1.75
*Organization orientation--self, employees.	1.71
*Organization orientation--self, efficiency.	1.39
*Constrained employee orientation.	1.37
Organization orientation--other, profits.	1.32
*Job orientation--other, salary & benefits.	1.29
*Job orientation--self, salary & benefits.	1.25
*Role orientation-self, environment.	1.13
*Management style--coercive.	1.09
Organization orientation--self, environment.	.93
*Job orientation--self, working conditions.	.93
*Role orientation--self, profits.	.92
*Role orientation--other, environment.	.89
*Negative job attribute--location, facilities, conditions.	.81
*Role orientation--self, efficiency.	.76
Negative job attribute--management.	.76
*Job orientation--self, job ease.	.72
Age	.71
*Positive job attribute--people.	.68
*Sex (male, high; female, low).	.67
Pepco information source--grapevine in department.	.66
*Relative importance of sub-system.	.64
*Organization orientation--other, environment.	.61
*Role orientation--self, employees.	.61
*Pepco information source--supervisor.	.59
*Perceived management communication--giving.	.58
Years with Pepco.	.56
Unfavorable upward communication.	.51
*Diffusion source--news board.	.50
*Positive job attribute--salary benefits.	.46
*Pepco information source--Pepco media.	.43
Job orientation--other, job ease.	.43
*Job orientation--other, working conditions.	.43
Pepco information source--outside media	.38
Perceived management communication--control.	.29
*Prefer government regulation information.	.21

*Items greater than or less than all other types.

[1]Consists primarily of hourly and weekly production workers, a few clerical workers, two supervisors at lower levels.

[2]In a normal distribution, 68% of all items should fall between +1 and -1, 95% between +2 and -2, 99% between +3 and -3.

Table 1 (continued)

*Diffusion source--outside media.	.20
Job Satisfaction.	.17
Diffusion source--Pepconian.	.10
*Constrained consumer orientation.	.10
Job orientation--self, people.	.08
*Constrained profit orientation.	.06
Favorable upward communication.	.04
Negative job attribute--supervisor.	.02
Negative job attribute--internal dissention.	.02
Management style--normative.	.00
Negative job attribute--difficulty of promotion.	.00
Positive job attribute--job ease.	- .01
Management style--problem solving.	- .06
Constrained efficiency orientation.	- .07
Negative job attribute--salary & benefits.	- .07
*Diffusion source--external word of mouth.	- .13
Negative job attribute--nature of job.	- .15
Perceived management communication--change	- .16
Role orientation--other, efficiency.	- .22
Anticipated direct line use.	- .28
*Sub-system conflict.	- .29
Positive job attribute--security.	- .30
Management style--utilitarian.	- .36
*Positive job attribute--treatment by company.	- .44
Pepconian exposure.	- .44
Diffusion source--Perspective.	- .47
*Organization orientation--other, employees.	- .49
*Organization orientation--other, efficiency.	- .57
*Race (white, high; black, low).	- .60
Diffusion source--internal formal word-of-mouth.	- .60
*Pepco information source--grapevine from other dept.	- .61
News board evaluation.	- .64
*Diffusion source--internal informal word-of-mouth.	- .66
*Perceived authoritarian organization (low), democratic organization (high).	- .66
*Constrained environment orientation.	- .69
*Pepconian evaluation.	- .75
*Organization orientation--other, consumers.	- .76
*Perceived management communication--seeking.	- .79
*Role orientation--other, consumers.	- .83
*Job orientation--other, people.	- .85
*Role orientation--other, employees.	- .94
*Prefer information on decisions affecting consumers.	- .98
Upward mobility aspiration.	-1.02
*External communication.	-1.14
*News board exposure.	-1.19
*Prefer Pepco financial information.	-1.20
*Job orientation--other, achievement.	-1.23
*Organization orientation--self, profits.	-1.26

Table 1 (continued)

*Expected newspaper exposure.	-1.28
*Desire to attend seminars.	-1.34
*Job orientation--self, achievement.	-1.34
*Perspective exposure.	-1.36
*Positive job attribute--work satisfaction, challenge.	-1.51
*Job decision situation--recognize problem.	-1.58
*Prefer information on decisions affecting consumers.	-1.61
*Organization orientation--self, consumers.	-1.62
*Level in hierarchy.	-1.67
*Perspective evaluation.	-1.80
*Education.	-1.83
*Role orientation--self, consumers.	-1.87

Table 2: Relative importance of 101 items in defining employee type II, management.[1]

Item	Z-score[2]
*Perspective exposure.	2.33
*Perspective evaluation.	2.17
*Level in hierarchy.	2.11
*Organization orientation--self, consumers.	1.59
*Prefer information on decisions affecting consumers	1.54
*Management style--utilitarian.	1.53
*Job satisfaction.	1.43
*Organization orientation--other, consumers.	1.33
*Diffusion source--internal formal word-of-mouth.	1.33
*Favorable upward communication.	1.21
*Age.	1.20
*Pepconian exposure.	1.13
Role orientation--self, consumers.	1.10
*Positive job attribute--treatment by company.	1.05
*Desire to attend seminars.	1.04
*Role orientation--other, employees.	1.03
*Positive job attribute--work satisfaction, challenge.	1.01
*Years with Pepco.	1.01
*External communication.	1.01
*Management style--normative.	.99
*Perceived management communication--seeking.	.96
*Education.	.94
*News board evaluation.	.93
*Unfavorable upward communication.	.91
*Race (white, high; black, low).	.88
*Role orientation--other, efficiency.	.88
*Pepconian evaluation.	.87
*Management style--problem solving.	.71
*Organization orientation--self, profits.	.66
*Expected newspaper exposure.	.65
*Pepco information source--outside media.	.58
*Organization orientation--other, efficiency.	.58
Job orientation--self, achievement.	.58
*Diffusion source--Perspective.	.56
*Organization orientation--other, employees.	.56
*Job orientation--self, people.	.54
*Job orientation--other, people.	.38
News board exposure.	.37
*Positive job attribute--salary & benefits.	.34
*Perceived management communication--control.	.34

*Items greater than or less than all other types

[1] Consists of all executives interviews, most supervisors, several secretaries, a few workmen.

[2] In a normal distribution, 68% of all items should fall between +1 and -1, 95% between +2 and -2, 99% between +3 and -3.

Table 2 (continued)

Perceived authoritarian organization (low), democratic organization (high).	.34
Pepco information source--supervisor.	.30
Role orientation --other, consumers.	.25
Relative importance of sub-system.	.20
Diffusion source--internal informal word-of-mouth.	.14
Prefer Pepco financial information.	.10
Prefer government regulation information.	.07
Job orientation--other, achievement.	.06
*Diffusion source--external word-of-mouth.	.05
Role orientation--self, efficiency.	.05
*Negative job attribute--internal dissention.	.04
Prefer information on decisions affecting employees	-.01
Job orientation--other, salary & benefits.	- .06
Organization orientation--self, efficiency.	- .06
Job orientation--other, working conditions.	- .07
*Perceived management communication--change.	- .09
Pepco information source--Pepco media	- .13
Sub-system conflict.	- .15
Sex (Male, high; female, low).	- .16
Constrained environment orientation.	- .18
Pepco information source--grapevine from other departments.	- .22
Constrained consumer orientation.	- .25
*Negative job attribute--nature of job.	- .29
Negative job attribute--location, facilities, conditions.	- .38
Role orientation--self, employees.	- .39
*Positive job attribute--security.	- .39
Job decision situation--recognize problem.	- .44
*Constrained profit orientation.	- .45
*Diffusion source--outside media.	- .50
*Diffusion source--Pepconian.	- .54
*Role orientation--other, environment.	- .68
*Role orientation--self, profits.	- .74
*Diffusion source--news board.	- .76
*Constrained efficiency orientation.	- .80
Job decision situation--face constraints.	- .89
*Negative job attribute--salary & benefits.	- .90
*Job orientation--self, working conditions.	- .91
*Organization orientation--other, environment.	- .92
*Job orientation--other, job ease.	- .95
*Positive job attribute--people.	- .97
*Perceived management communication--giving.	-1.00
*Positive job attribute--job ease.	-1.01
*Constrained employee orientation.	-1.02
*Management style--coercive.	-1.04
*Upward mobility aspiration.	-1.06
*Job orientation--self, salary & benefits.	-1.08
*Role orienation--self, environment.	-1.11

Table 2 (continued)

*Negative job attribute--supervisor.	-1.13
*Job orientation--self, job ease.	-1.14
*Negative job attribute--managemnt.	-1.21
*Prefer information on own role in Pepco.	-1.24
*Negative job attribute--difficulty of promotion.	-1.24
*Anticipated direct line use.	-1.35
*Positive job attribute--location, facilities, conditions.	-1.35
*Role orientation--other, profits.	-1.41
*Organization orientation--self, employees.	-1.57
*Organization orientation--other, profits.	-1.71
*Organization orientation--self, environment.	-1.90
*Prefer information on other employees.	-1.92
*Diffusion source--not heard.	-1.94
*Pepco information source--grapevine in department.	-2.22

Table 3: Relative importance of 101 items in defining empbyee type III, Dissatisfied younger workers.[1]

Item	Z-score[2]
*Upward mobility aspiration.	2.45
*Pepco information source--grapevine in department.	2.43
*Negative job attribute--supervisor.	2.20
*Anticipated direct line use.	2.10
*Negative job attribute--difficulty of promotion.	1.78
*Job orientation--other, achievement.	1.60
*Organization orientation--self, environment.	1.56
*Negative job attribute--salary & benefits.	1.40
*Job orientation--other, job ease.	1.36
*Positive job attribute--job ease.	1.35
*Organization orientation--other, profits.	1.34
*Role orientation--self, consumers.	1.28
*Job decision situation--recognize problem	1.25
*Negative job attribute--management.	1.18
*News board exposure.	1.15
*Role orientation--other, consumers.	1.13
*Prefer information on decisions affecting employees.	1.07
*Perceived authoritarian organization (low), democratic organization (high).	1.06
*Constrained efficiency orientation.	1.03
*Pepco information source--grapevine from other department.	1.00
*Job orientation--self, achievement.	.91
*Prefer Pepco financial information.	.90
Job orientation--self, job ease.	.70
*Diffusion source--Pepconian.	.66
Management style--coercive.	.63
Education.	.56
*Negative job attribute--nature of job.	.53
Role orientation--other, environment.	.51
Prefer information on decisions affecting consumers.	.50
Desire to attend seminars.	.49
*Diffusion source--internal informal word-of-mouth.	.42
Perceived management communication--giving.	.40
Organization orientation--other, environment.	.38
Expected newspaper exposure.	.33
Diffusion source--news board.	.30
Role orientation--self, environment.	.25
Diffusion source--not heard.	.24
Job orientation--other, people.	.24

*Items greater than or less than for all other types.

[1]The majority of people in this type are middle echelon, clerical and service workers; also some production workers and secretaries.

[2]In a normal distribution, 68% of all items should fall between +1 and -1, 95% between +2 and -2, 99% between +3 and -3.

Table 3 (continued)

Positive job attribute--people	.22
Organization orientation--self, employees.	.20
*Constrained environment orientation.	.19
Organization orientation--self, profits.	.15
*Sub-system conflict.	.14
Constrained employee orientation.	.11
Diffusion source--outside media.	.10
Prefer information on own role in Pepco.	.05
Role orientation--self, profits.	.01
Organization orientation--other efficiency.	- .06
Diffusion source--external word-of-mouth.	- .06
Job orientation--self, working conditions.	- .08
Role Orientation--other, profits.	- .09
Organization orientation--self, consumers.	- .11
Job orientation--self--salary & benefits.	- .16
*Job orientation--other, working conditions.	- .18
*Sex (male, high; female, low).	- .19
Organization orientation--other, employees.	- .20
Race (white, high; black, low).	- .22
External communication.	- .23
*Positive job attribute--security.	- .25
*Perceived management communication--change.	- .27
Positive job attribute--work satisfaction, challenge.	- .28
Positive job attribute--treatment by company.	- .28
*Role orientation--self, efficiency.	- .31
Perspective evaluation.	- .34
Perceived management communication--seeking.	- .36
Role orientation--other, employees.	- .39
*Constrained consumer orientation.	- .40
Constrained profit orientation.	- .41
*Role orientation--other, efficiency.	- .45
*Diffusion source--perspective.	- .48
Pepconian evaluation.	- .49
*Perceived management communication--control.	- .51
*Management style--problem solving.	- .57
Prefer information on other employees.	- .57
Organization orientation--other, consumers.	- .57
*Pepco information source--Pepco media.	- .58
*Negative job attribute--location, facilities, conditions.	- .62
*Job orientation--self, people.	- .64
*Negative job attribute--internal dissention.	- .66
Level in hierarchy.	- .68
*News board evaluation.	- .73
*Role orientation--self, employees.	- .75
*Prefer government regulation information.	- .92
*Relative importance of sub-system.	- .93
*Pepco information source--supervisor.	- .95
Perspective exposure.	- .98

Table 3 (continued)

*Diffusion source--Internal formal word-of-mouth.	- .98
*Positive job attribute--salary & benefits.	-1.05
*Job orientation--other, salary & benefits.	-1.10
*Pepco information source--outside media.	-1.20
Positive job attribute--location, facilities, conditions.	-1.28
*Job decision situation--face constraints.	-1.39
*Management style--utilitarian.	-1.42
*Pepconian exposure.	-1.45
*Organization orientation--self, efficiency.	-1.48
*Management style--normative.	-1.54
*Unfavorable upward communication.	-1.54
*Favorable upward communication.	-1.85
*Years with Pepco.	-1.97
*Age.	-2.30
*Job satisfaction.	-2.32

Table 4: Most important differences between employee types I and III, constrained older workers and dissatisfied younger workers.

Item	Z-scores I	III	Difference
Positive job attribute--location, facilities, conditions.	2.528	-1.285	3.813
Job decision situation--face constraints	1.753	-1.394	3.148
Prefer information on other employees.	2.499	- .569	3.068
Age	.706	-2.305	3.011
Organization orientation--self, efficiency.	1.387	-1.479	2.866
Years with Pepco.	.564	-1.965	2.529
Job satisfaction.	.175	-2.323	2.498
Job orientation-other, salary, benefits	1.290	-1.105	2.395
Unfavorable upward communication.	.513	-1.545	2.058
Role orientation--other, profits.	1.951	- .092	2.043
Diffusion source--not heard.	2.162	.242	1.920
* * * * * * * * * * * * * * * * * * * *			
Prefer information on decisions affecting employees.	- .981	1.068	-2.049
Prefer Pepco financial information.	-1.205	.898	-2.103
Prefer information on decisions affecting consumers.	-1.613	.496	-2.109
Negative job attribute--supervisor.	.021	2.199	-2.178
Job orientation--self, achievement.	-1.341	.907	-2.247
News board exposure.	-1.188	1.151	-2.339
Anticipated direct line use.	- .277	2.103	-2.380
Education.	-1.829	.557	-2.386
Job decision situation--recognize problem.	-1.581	1.247	-2.828
Job orientation--other, achievement.	-1.234	1.596	-2.830
Role orientation--self, consumers.	-1.874	1.280	-3.154
Upward mobility aspiration.	-1.019	2.446	-3.465

Table 5: Most important differences between employee types I and II, constrained older workers and management.

Item	Z-scores I	Z-scores II	Difference
Prefer information on other employees	2.499	-1.922	4.420
Diffusion source--not heard.	2.162	-1.941	4.103
Positive job attribute--location, facilities, conditions.	2.528	-1.355	3.883
Role orientation--other, profits.	1.951	-1.410	3.362
Organization orientation--self, employees.	1.712	-1.574	3.286
Prefer information on own role in Pepco.	1.841	-1.244	3.085
Organization orientation--other, profits	1.318	-1.714	3.033
Pepco information source--grapevine in department.	.659	-2.220	2.880
Organization orientation--self, environment.	.931	-1.902	2.833
Job decision situation--face constraints	1.753	- .890	2.643
Constrained employee orientation.	1.366	-1.019	2.385
Job orientation--self, salary, benefits.	1.248	-1.082	2.330
Role orientation--self, environment.	1.134	-1.106	2.240
Management style--coercive.	1.086	-1.038	2.124
* * * * * * * * * * * * * * * * * *			
Organization orientation--other, consumers.	- .758	1.335	-2.093
External communication.	-1.137	1.009	-2.146
Desire to attend seminars.	-1.337	1.037	-2.374
Positive job attribute--work satisfaction, challenge.	-1.510	1.014	-2.524
Education.	-1.829	.942	-2.771
Role orientation--self, consumers.	-1.874	1.099	-2.973
Prefer information on decisions affecting consumers.	-1.613	1.541	-3.154
Organization orientation--self, consumers.	-1.623	1.588	-3.211
Perspective exposure.	-1.362	2.330	-3.692
Level in hierarchy.	-1.674	2.111	-3.785
Perspective evaluation.	-1.803	2.174	-3.977

Table 6: Most important differences between employee types II and III, management and dissatisfied younger workers.

Item	Z-scores II	III	Difference
Job satisfaction.	1.430	-2.323	3.753
Age.	1.205	-2.305	3.509
Perspective exposure.	2.330	- .976	3.306
Favorable upward communication.	1.210	-1.855	3.064
Years with Pepco.	1.011	-1.965	2.976
Management style--utilitarian.	1.528	-1.416	2.944
Level in hierarchy.	2.111	- .684	2.795
Pepconian exposure.	1.127	-1.452	2.579
Management style--normative.	.994	-1.543	2.538
Perspective evaluation.	2.174	- .339	2.513
Unfavorable upward communication.	.912	-1.545	2.457
Diffusion source--internal formal word-of-mouth.	1.331	- .979	2.310
* * * * * * * * * * * * * * * * * *			
Diffusion source--not heard.	-1.941	.242	-2.183
Negative job attribute--salary, benefits.	- .900	1.398	-2.298
Job orientation--other, job ease.	- .947	1.360	-2.307
Positive job attribute--job ease.	-1.013	1.354	-2.367
Negative job attribute--management.	-1.213	1.181	-2.395
Negative job attribute--difficulty of promotion.	-1.245	1.783	-3.028
Organization orientation--other, profit	-1.714	1.338	-3.053
Negative job attribute--supervisor.	-1.134	2.199	-3.333
Anticipated direct line use.	-1.351	2.103	-3.454
Organization orientation--self, environment.	-1.902	1.558	-3.460
Upward mobility aspiration.	-1.063	2.446	-3.508
Pepco information source--grapevine in department.	-2.220	2.434	-4.655

Table 7: Job orientation of three employee types and predictions by workers for management and management for workers, in Z-scores.[1]

Type[2]	Salary-Benefits	People	Working Conditions	Achievement	Job Ease
Constrained older workers					
Self	1.2	.1	.9	-1.3	.7
Management	1.3	- .8	.4	-1.2	.4
Dissatisfied younger workers					
Self	- .2	- .6	- .1	.9	.7
Management	-1.1	.2	- .2	1.6	1.4
Management					
Self	-1.1	.5	- .9	.6	-1.1
Workers[3]	- .1	.4	- .1	.1	- .9

[1] Z-scores indicate the importance of each variable in defining the type.

[2] Although variables are in Z-scores, comparison of self and other scores give an approximation of coorientation levels. Comparison of self and other scores for the same type indicates congruency, comparison of self scores between types indicates overlap (agreement), and comparison of predicted other scores with the self score for that type indicates accuracy.

[3] Since some non-managerial respondents loaded on this type, some of the 'other' scores were predictions for management rather than for workers.

Table 8: Decision situation variables for three employee types, in Z-scores.

Type	Recognize Problem	Face Constraints
Constrained older workers	-1.6	1.8
Dissatisfied younger workers	1.2	-1.4
Management	- .4	- .9

Table 9: Perceived attributes of their jobs by three employee types in Z-scores.

Attribute[1]	Constrained older workers	Dissatisfied younger workers	Management
Positive			
Location, facilities, conditions	2.5	-1.3	-1.4
Work satisfaction, challenge	-1.5	- .3	1.0
Salary & benefits	.5	-1.0	.3
Treatment by company	- .4	- .3	1.0
People work with	.7	.2	-1.0
Job security	- .3	- .3	- .4
Job ease	- .0	1.4	-1.0
Negative			
Location, facilities, conditions	.8	- .6	- .4
Nature of job	- .2	.5	- .3
Salary & benefits	- .1	1.4	- .9
Supervisor	.0	2.2	-1.1
Management	.8	1.2	-1.2
Internal dissention	.0	- .7	.0
Difficulty of promotion	.0	1.8	-1.2

[1] Categories were developed through meaning analysis of two open-ended questions.

Table 10: Orientations three types of employees think Pepco should have as an organization and predictions by workers for management and management for workers, in Z-scores.

Type[1]	Orientation: Profits	Consumers	Efficiency	Employees	Environment
Constrained older workers					
Self	-1.3	-1.6	1.4	1.7	.9
Management	1.3	- .8	- .6	- .5	.6
Dissatisfied younger workers					
Self	.2	- .1	-1.5	.2	1.6
Management	1.3	- .6	- .1	- .2	.4
Management					
Self	.7	1.6	- .1	-1.6	-1.9
Workers[2]	-1.7	1.3	.6	.6	- .9

[1] For interpretation of coorientation variables, see footnote 2, Table 7.
[2] For limitations of these scores, see footnote 3, Table 7.

Table 11: Contraints perceived by three types of employees on possible orientations of Pepco as an organization, in Z-scores.

Type	Orientation: Profits	Consumers	Efficiency	Employees	Environment
Constrained older workers	.1	.1	- .1	1.4	- .7
Dissatisfied younger workers	- .4	- .4	1.0	.1	.2
Management	- .5	- .3	- .8	-1.0	- .2

Table 12: Orientations three types of employees have in their job roles and predictions of workers of what management thinks their role orientation should be and of management of what workers think its role should be, in Z-scores.

Type[1]	Orientation: Profits	Consumers	Efficiency	Employees	Environment
Constrained older workers					
Self	.9	-1.9	.8	.6	1.1
Management	2.0	- .8	- .2	- .9	.9
Dissatisfied younger workers					
Self	.0	1.3	- .3	- .8	.2
Management	- .1	1.1	- .4	- .4	.5
Management					
Self	- .7	1.1	.1	- .4	-1.1
Workers[2]	-1.4	.2	.9	1.0	- .7

[1]For interpretation of coorientation variables, see footnote 2, Table 7 (note: accuracy is not applicable here).
[2]For limitations of these scores, see footnote 3, Table 7.

Table 13: Aspiration and satisfaction of three employee types in Z-scores

Type	Upward mobility Aspiration	Job Satisfaction
Constrained older workers	-1.0	.2
Dissatisfied younger workers	2.4	-2.3
Management	-1.1	1.4

Table 14: Relative importance of five sources of information about Pepco for three employee types, in Z-scores.

Source	Constrained older workers	Dissatisfied younger workers	Management
Supervisor	.6	-1.0	.3
Grapevine in department	.7	2.4	-2.2
Grapevine from other department	- .6	1.0	- .2
Pepco media	.4	- .6	- .1
Outside media	.4	-1.2	.6

Table 15: Relative importance of three types of communication for three employee types, in Z-scores.

	Constrained older workers	Dissatisfied younger workers	Management
External communication	-1.1	- .2	1.0
Favorable upward communication	.0	-1.9	1.2
Unfavorable upward communication	.5	-1.5	.9

Table 16: Diffusion sources for five information items about Pepco, by employee types, in Z-scores.

Source	Constrained older workers	Dissatisfied younger workers	Management
Not heard	2.2	.2	-1.9
News board	.5	.3	- .8
Pepconian	.1	.7	- .5
Perspective	- .5	- .5	.6
Outside Media	.2	.1	- .5
Internal formal word-of-mouth	- .6	-1.0	1.3
Internal informal word-of-mouth	- .7	.4	.1
External word-of-mouth	- .1	- .1	.1

Table 17: Exposure to present and planned Pepco media by three employee types, in Z-scores.

	Constrained older workers	Dissatisfied younger workers	Management
News board exposure	-1.2	1.2	.4
Pepconian exposure	- .4	-1.5	1.1
Perspective exposure	-1.4	-1.0	2.3
Expected newspaper exposure	-1.3	.3	.7
Desire to attend seminars	-1.3	.5	1.0
Anticipated direct line use	- .3	2.1	-1.4

Table 18: Evaluation of Pepco media by three employee types, in Z-scores.

	Constrained older workers	Dissatisfied younger workers	Management
News board	- .6	- .7	.9
Pepconian	- .7	- .5	.9
Perspective	-1.8	- .3	2.2

Table 19: Types of Pepco information preferred by three employee types, in Z-scores.

Type of information	Constrained older workers	Dissatisfied younger workers	Management
Other employees	2.5	- .6	-1.9
Pepco financial information	-1.2	.9	.1
Government regulation	.2	- .9	.1
Own role in Pepco	1.8	.0	-1.2
Decisions affecting consumers	-1.6	.5	1.5
Decisions affecting employees	-1.0	1.1	- .0

Table 20: Perceived nature of Pepco as an organization by three employee types, in Z-scores.

Type	Democratic (high), authoritarian (low)
Constrained older workers	- .7
Dissatisfied younger workers	1.1
Management	.3

Table 21: Purpose of management communication in Pepco as perceived by three employee types, in Z-scores.

Purpose of communication	Constrained older workers	Dissatisfied younger workers	Management
Information seeking	- .8	- .4	1.0
Information giving	.6	.4	-1.0
Organizational control	.3	- .5	.3
Organizational change	- .2	- .3	- .1

Table 22: Management style in Pepco as perceived by three employee types, in Z-scores.

Style	Constrained older workers	Dissatisfied younger workers	Management
Coercive	1.1	.6	-1.0
Utilitarian	- .4	-1.4	1.5
Normative	.0	-1.5	1.0
Problem solving	- .1	- .6	.7

Table 23: Relative importance of subsystems and conflict between sub-sustems as perceived by three employee types, in Z-scores.

	Constrained older workers	Dissatisfied younger workers	Management
Relative importance of sub-system	- .6	- .9	.2
Sub-system conflict	- .3	.1	- .2

Table 23: Locator variables for three employee types, in Z-scores.

	Constrained older workers	Dissatisfied younger workers	Management
Years with Pepco	.6	-2.0	1.0
Age	.7	-2.3	1.2
Sex (male, high; female, low)	.7	- .2	- .2
Education	-1.8	.6	.9
Race (white, high; black, low)	- .6	- .2	.9
Level in hierarchy	-1.7	- .7	2.1

Table 24: Percentage of total sample, purposive sample (personal interviews), and random sample (telephone interviews) in each of three employee types.

Sample	Constrained older workers	Dissatisfied younger workers	Management
Total (n=100)	42	28	30
Purposive (n=50)	37	30	33
Random (n=50)	47	26	26

Table 25: Scale, mean, and standard deviation for each item included in the study.

Item	Scale	Mean	Standard Deviation
Job orientation--self, salary & benefits.	1-5	3.93	1.14
Job orientation--self, people.	1-5	3.30	1.11
Job orientation--self, working conditions.	1-5	3.09	1.14
Job orientation--self, achievement.	1-5	3.41	1.29
Job orientation--self, job ease.	1-5	1.27	0.68
Job orientation--other, salary & benefits.	1-5	3.77	1.36
Job orientation--other, people.	1-5	2.92	1.15
Job orientation--other, working conditions.	1-5	2.76	1.22
Job orientation--other, achievement.	1-5	3.56	1.37
Job orientation--other, job ease.	1-5	1.55	1.23
Positive job attribute--location, facilities, conditions.	0-1	0.25	0.44
Positive job attribute--work satisfaction, challenge.	0-1	0.60	0.51
Positive job attribute--salary & benefits.	0-1	0.14	0.35
Positive job attribute--treatment by company.	0-1	0.07	-.26
Positive job attribute--people.	0-1	0.30	0.46
Positive job attribute--security.	0-1	0.10	0.63
Positive job attribute--job ease.	0-1	0.06	0.24
Negative job attribute--location, facilities, conditions.	0-1	0.17	0.38
Negative job attribute--nature of job.	0-1	0.16	0.37
Negative job attribute--salary & benefits.	0-1	0.25	0.44
Negative job attribute--supervisor.	0-1	0.13	0.34
Negative job attribute--management.	0-1	0.18	0.39
Negative job attribute--internal dissention.	0-1	0.13	0.34
Negative job attribute--difficulty of promotion.	0-1	0.14	0.35
Job decision situation--recognize problem.	0-1	0.73	0.76
Job decision situation--face constraints.	0-1	0.36	0.73
Years with Pepco.	1-6	3.00	1.80
Organization orientation--self, profits.	1-5	1.88	1.21
Organization orientation--self, consumers.	1-5	3.37	1.24
Organization orientation--self, efficiency.	1-5	3.53	1.19
Organization orientation--self, employees.	1-5	3.36	1.31
Organization orientation--self, environment.	1-5	2.91	1.47
Organization orientation--other, profits.	1-5	3.57	1.67
Organization orientation--other, consumers.	1-5	3.47	1.17
Organization orientation--other, efficiency.	1-5	3.23	1.22
Organization orientation--other, employees.	1-5	2.04	1.35
Organization orientation--other, environment.	1-5	2.27	1.17
Constrained profit orientation.	0-1	0.11	0.47
Constrained consumer orientation.	0-1	0.02	0.14
Constrained efficiency orientation.	0-1	0.03	0.17
Constrained employee orientation.	0-1	0.13	0.34
Constrained environment orientation.	0-1	0.10	0.46

Table 25 (continued)

Item	Scale	Mean	Standard Deviation
Role orientation--self, profits.	1-5	2.23	1.50
Role orientation--self, consumers.	1-5	3.10	1.45
Role orientation--self, efficiency.	1-5	3.63	1.31
Role orientation--self, employees.	1-5	3.47	1.40
Role orientation--self, environment.	1-5	2.19	1.28
Role orientation--other, profits.	1-5	3.11	1.60
Role orientation--other, consumers.	1-5	3.28	1.51
Role orientation--other, efficiency.	1-5	3.55	1.45
Role orientation--other, employees.	1-5	2.19	1.40
Role orientation--other, environment.	1-5	2.04	1.16
Upward mobility aspiration.	0-2	1.20	0.78
Job satisfaction.	0-2	1.32	0.62
Pepco information source--supervisor.	1-5	3.96	1.25
Pepco information source--grapevine in department.	1-5	3.48	1.22
Pepco information source--grapevine from other departments.	1-5	2.96	1.17
Pepco information source--Pepco media.	1-5	3.01	1.23
Pepco information source--outside media.	1-5	1.67	1.10
External communication.	0-2	0.92	0.66
Favorable upward communication.	0-2	1.03	0.78
Unfavorable upward communication.	0-2	1.38	0.66
Diffusion source--not heard.	0-5	1.52	1.20
Diffusion source--news board.	0-5	0.67	0.88
Diffusion source--Pepconian.	0-5	0.37	0.72
Diffusion source--Perspective.	0-5	0.04	0.24
Diffusion source--outside media.	0-5	0.70	0.88
Diffusion source--internal formal word-of-mouth.	0-5	0.83	1.29
Diffusion source--internal informal word-of mouth.	0-5	0.77	1.04
Diffusion source--external word-of-mouth.	0-5	0.04	0.20
News board exposure.	0-4	3.33	0.95
News board evaluation.	0-2	1.49	0.63
Pepconian exposure.	0-3	2.00	0.89
Pepconian evaluation.	0-2	1.44	0.67
Perspective exposure.	0-3	0.57	1.05
Perspective evaluation.	0-2	0.47	0.82
Expected newspaper exposure.	0-3	2.29	0.98
Desire to attend seminars.	0-2	1.47	0.63
Anticipated direct line use.	0-3	1.79	0.86
Prefer information on other employees.	1-6	3.31	1.61
Prefer Pepco financial information.	1-6	2.33	1.46
Prefer government regulation information.	1-6	2.63	1.38
Prefer information on own role in Pepco.	1-6	4.07	1.57
Prefer information on decisions affecting consumers.	1-6	3.43	1.37
Prefer information on decisions affecting employees.	1-6	5.23	1.10
Perceived management communication--seeking.	0-2	0.78	0.85
Perceived management communication--giving.	0-2	1.60	0.57

Table 25 (continued)

	Scale	Mean	Standard Deviation
Perceived management communication--control.	0-2	1.63	0.68
Perceived management communication--change.	0-2	0.74	0.79
Perceived authoritarian-organization (low), democratic (high).	0-2	0.21	0.43
Management style--coercive.	0-2	0.44	0.57
Management style--utilitarian.	0-2	0.73	0.55
Management style--normative.	0-2	0.91	0.57
Management style--problem solving.	0-2	0.67	0.59
Relative importance of subsystem.	0-2	1.54	0.66
Subsystem conflict.	0-2	0.86	0.64
Age.	1-5	3.27	1.14
Sex (male, high; female, low)	0-1	0.84	0.37
Education.	0-5	1.80	1.30
Race (white, high; black, low).	0-1	0.79	0.41
Level in hierarchy.	0-3	0.86	0.85

Table 25a. Rankings of five possible sources of information needed about Pepco by total sample (n=100).

Source	Ranking 1	2	3	4	5
Grapevine in department	22	34	23	12	9
Grapevine from other departments	11	22	30	26	11
Pepco media	18	15	24	36	7
Outside media	4	5	10	16	65
Supervisor	47	24	13	10	6

Table 26: Frequency of three types of communication by total sample (n=100).

	Often	Sometimes	Never
External communication	18	56	26
Favorable upward communication	32	39	29
Unfavorable upward communication	48	42	10

Table 27: Number of persons hearing about five information items about Pepco from different sources, for total sample (n=100).

Diffusion source	Number items 0	1	2	3	4	5
Not heard	22	30	32	7	8	1
News board	56	25	15	4	0	0
Pepconian	74	17	8	0	1	0
Perspective	97	2	1	0	0	0
Outside media	52	31	13	3	1	0
Internal formal word-of-mouth	60	18	10	5	5	2
Internal informal word-of-mouth	55	24	12	7	2	0
External word-of-mouth	96	4	0	0	0	0

Table 28: Frequency of exposure to news board by total sample (n=100).

Twice a week	55
Once a week	31
Once every two weeks	6
Hardly ever	7
No	1

Table 29: Frequency of exposure to Pepconian by total sample (n=100).

Every story in each issue	32
Some stories in each issue	43
Sometimes look through it	18
Almost never read it	7

Table 30: Frequency of exposure to Perspective by total sample (n=100).

Don't receive or never read	73
Read an occasional issue	9
Read most issues	6
Read every issue	12

Table 31: Expected frequency of exposure to proposed newspaper by total sample (n=100).

Every issue	61
Every other issue or so	12
Occasionally	22
Hardly ever	5

Table 32: Desire to attend seminars by total sample (n=100).

Yes, very much	52
Possibly	42
No, not at all	6

Table 33:Anticipated use of a "direct line" by total sample (n=100).

Often	18
Sometimes	53
Rarely	19
Never	10

Table 34: Evaluation of Pepco media by total sample for meeting information needs about Pepco (n=100).

	Good	Average	Poor
News board	56	37	7
Pepconian	54	36	10
Perspective	21	5	74[1]

[1]Includes those who don't receive Perspective.

Table 35: Frequency of ranking of information preferences about Pepco by total sample (n=100).

	Ranking					
	1	2	3	4	5	6
Information on other employees	11	13	25	16	17	18
Pepco financial information	4	7	9	18	22	40
Government regulation information	4	8	13	18	36	21
Own role in Pepco	22	21	26	15	5	11
Decisions affecting consumers	5	23	16	31	16	9
Decisions affecting employees	54	28	11	2	4	1